

IN THE TITLE OF THE INVENTION:

Please rewrite the Title of Invention as follows:

--COMPACT HOLOGRAPHIC LASER SCANNER HAVING MINIMIZED  
HOUSING DIMENSIONS DETERMINED BY SCANNING DISC AND BEAM  
FOLDING MIRROR PARAMETERS--

IN THE CLAIMS TO INVENTION:

Please cancel original claims 1-68 without prejudice and add  
claim 69-70 as follows:

- 69. A holographic laser scanner comprising:
- a scanner housing having width, length and height dimensions, and a scanning window;
  - a plurality of laser beam sources for producing a plurality of laser beams;
  - a holographic scanning disc, rotatable about an axis of rotation, and supporting a plurality of holographic optical elements for scanning and focusing said plurality of laser beams so as to produce a plurality of scanning planes;
  - a plurality of beam folding mirrors disposed about said holographic scanning disc, for folding said plurality of scanning planes so as to project a complex scanning pattern through said scanning window and within the spatial extent of a predefined 3-D scanning volume; and
  - a plurality of parabolic light collecting mirrors disposed beneath said holographic scanning disc,
- wherein the geometrical dimensions of said beam folding mirrors in conjunction with the geometrical dimensions of said holographic scanning disc determine said width and length dimensions of said scanner housing, and
- wherein said geometrical dimensions of said beam folding mirrors and parabolic light collecting mirrors beneath said

holographic scanning disc determine said height dimension of said scanner housing.--

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--70. The holographic laser scanner of claim 69, wherein each said laser beam source comprises a laser diode, and wherein said holographic laser scanner further comprises a photodetector arranged with each parabolic said light collecting mirror for producing scan data signals.--

ABSTRACT OF DISCLOSURE

Please rewrite the Abstract as follows:

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--Disclosed is a holographic laser scanner of ultra-compact design. The scanner has a scanner housing having width, length and height dimensions, and a holographic scanning disc for scanning and focusing a plurality of laser beams so as to produce a plurality of laser scanning planes. A plurality of beam folding mirrors are disposed about the holographic scanning disc, for folding the laser scanning planes so as to project a complete scanning pattern within the spatial extent of a predefined 3-D scanning volume. A plurality of parabolic light collecting mirrors are disposed beneath the holographic scanning disc for collecting laser light reflected from scanned code symbols. In accordance with principles of the present invention, the geometrical dimensions of the beam folding mirrors in conjunction with the geometrical dimensions of the holographic scanning disc determine the width and length dimensions of the scanner housing whereas the geometrical dimensions of the beam folding mirrors and parabolic light collecting mirrors beneath the holographic scanning disc determine the height dimension of the scanner housing. By virtue of the present invention, it is now possible to design and construct holographic laser scanner having minimize